Amendments to the Claims

Please amend the claims as follows.

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A vector system for producing infectious virus particles ~~having a characteristic of AAV4~~ comprising: at least one vector comprising [[a]]an isolated nucleic acid encoding an AAV4 capsid protein.

2. (Currently Amended) ~~The vector system of claim 1~~ A vector system for producing infectious virus particles comprising two vectors, at least one vector comprising a nucleic acid encoding an AAV4 capsid protein.

3. (Original) The vector system of claim 2, wherein the first vector comprises a nucleic acid encoding an AAV4 capsid protein and the second vector comprises a pair of AAV inverted terminal repeats.

4. (Original) The vector system of claim 2, wherein the first vector comprises a nucleic acid encoding an AAV4 Rep protein and the second vector comprises a pair of AAV inverted terminal repeats.

5. (Original) The vector system of claim 2, wherein the first vector comprises a nucleic acid encoding an AAV4 Rep protein and a nucleic acid encoding an AAV4 capsid protein and the second vector comprises a pair of AAV inverted terminal repeats.

6. (Original) The vector system according to claim 3, wherein the second vector comprises a pair of AAV2 inverted terminal repeats

7. (Original) The vector system according to claim 3, wherein the second vector comprises a pair of AAV3 inverted terminal repeats.

8. (Original) The vector system according to claim 3, wherein the second vector comprises a pair of AAV4 inverted terminal repeats.

9. (Currently Amended) The vector system according to claim 8, wherein ~~theAAV4~~ the AAV4 inverted terminal repeats comprise a Rep protein binding site having four "GAGC" repeats, wherein in the fourth nucleotide in the first two "GAGC" repeats is a T rather than a C.

10. (Original) The vector system according to claim 9, wherein the AAV4 inverted terminal repeats comprise the nucleotide sequence set forth in SEQ ID NO:6.

11. (Original) The vector system according to claim 9, wherein the AAV4 inverted terminal repeats comprise the nucleotide sequence set forth in SEQ ID NO:20.

12. (Original) The vector system according to claim 3, wherein the second vector comprises a pair of AAV5 inverted terminal repeats.

13. (Original) The vector system of claim 3, wherein the first vector further comprises a nucleic acid encoding an AAV2 Rep protein.

14. (Original) The vector system of claim 3, wherein the first vector further comprises a nucleic acid encoding an AAV3 Rep protein.

15. (Original) The vector system of claim 3, wherein the first vector further comprises a nucleic acid encoding an AAV4 Rep protein.

16. (Original) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has the amino acid sequence set forth in SEQ ID NO:2.

17. (Currently Amended) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has about 95% homology with the amino acid sequence set forth in SEQ ID NO:2, wherein the vector system replicates.

18. (Original) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has the amino acid sequence set forth in SEQ ID NO:8.

19. (Currently Amended) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has about 95% homology with the amino acid sequence set forth in SEQ ID NO:8, wherein the vector system replicates.

20. (Original) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has the amino acid sequence set forth in SEQ ID NO:9.

21. (Currently Amended) The vector system of claim 15 wherein the adeno-associated virus 4 Rep protein has about 95% homology with the amino acid sequence set forth in SEQ ID NO:9, wherein the vector system replicates.

22. (Original) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has the amino acid sequence set forth in SEQ ID NO:10.

23. (Currently Amended) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has about 95% homology with the amino acid sequence set forth in SEQ ID NO:10, wherein the vector system replicates.

24. (Original) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has the amino acid sequence set forth in SEQ ID NO:11.

25. (Currently Amended) The vector system of claim 15, wherein the adeno-associated virus 4 Rep protein has about 95% homology with the amino acid sequence set forth in SEQ ID NO:11, wherein the vector system replicates.

26. (Original) The vector system of claim 3, wherein the first vector further comprises a nucleic acid encoding an AAV5 Rep protein.

27. (Original) The vector system according to claim 4, wherein the first vector further comprises a nucleic acid encoding an AAV2 capsid protein.

28. (Original) The vector system according to claim 4, wherein the first vector further comprises a nucleic acid encoding an AAV3 capsid protein.

29. (Original) The vector system according to claim 4, wherein the first vector further comprises a nucleic acid encoding an AAV4 capsid protein.

30. (Original) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has the amino acid sequence set forth in SEQ ID NO:4.

31. (Original) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has the amino acid sequence defined by amino acids 438-601 set forth in SEQ ID NO:4.

32. (Currently Amended) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has about 98% homology to the amino acid sequence set forth in SEQ ID NO:4, wherein the vector system produces AAV particles.

33. (Original) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has the amino acid sequence set forth in SEQ ID NO:16.

34. (Currently Amended) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has about 98% homology to the amino acid sequence set forth in SEQ ID NO:16, wherein the vector system produces AAV particles.

35. (Original) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has the amino acid sequence set forth in SEQ ID NO:18.

36. (Currently Amended) The vector system of claim 29, wherein the adeno-associated virus 4 capsid protein has about 98% homology to the amino acid sequence set forth in SEQ ID NO:18, wherein the vector system produces AAV particles.

37. (Original) The vector system according to claim 4, wherein the first vector further comprises a nucleic acid encoding an AAV5 capsid protein.

38. (Original) A vector system according to claim 3, wherein the second vector further comprises a promoter between the inverted terminal repeats.

39. (Original) A vector system according to claim 38, wherein the promoter is functionally linked to an exogenous nucleic acid.

40. (Original) The vector system according to claim 2, wherein the system comprises a series of vectors.

41. (Original) A method of making a recombinant particle for delivering an exogenous nucleic acid to a cell, comprising delivering to a cell having helper function the vectors of the vector system of claim 39.

42. (Original) The method of claim 41, wherein the helper function is provided by a helper virus.